

TEQSPORT TACOMA REAR COOLANT BYPASS PIPE INSTALLATION MANUAL



This Installation Manual is intended for the following models:

2016-2023

Toyota Tacoma (3.5L)

PROLOGUE:

Study these instructions completely before proceeding to assembly. The installer must have a thorough knowledge of automotive systems operation. If unfamiliar with any of the concepts outlined in this instruction, we recommend the installation be completed by a qualified professional.

WARNING!

Extreme caution should be taken when performing maintenance or performance upgrades to your vehicle. Please observe and abide by any Warning or Caution labels placed on the various components and tools used when servicing your vehicle. If you have any questions regarding installation or the various components included with the TEQSPORT Tacoma Rear Coolant Bypass Pipe, consult with a Professional Mechanic, or contact TEQSPORT for more information.

PARTS INCLUDED:

Item	Quantity	Description
1	1	Aluminum Coolant Bypass
2	1	O-Ring
3	1	Coolant Port
4	2	Circular Gasket

TOOLS REQUIRED:

- Ratchet
- Ratchet Extension(s)
- Assorted Metric Wrenches
- Assorted Metric Sockets
- Pick
- Pliers

SAFETY REQUIREMENTS:

- Always wear safety glasses and any necessary protective garments. If using any fluids, chemicals, or solvents, a respirator is recommended.
- Always turn the ignition to the OFF position and disconnect the NEGATIVE battery terminal.
- Always use properly rated jack stands when working under your vehicle.
- Always keep limbs and parts away from moving drivetrain parts.
- Only operate drivetrain in a safe space and well-ventilated areas.

BEFORE YOU BEGIN:

Remove contents from the TEQSPORT Tacoma Rear Coolant Bypass Pipe and verify that ALL necessary hardware is present.

This Guide details how to install the Rear Coolant Bypass Pipe with the Engine still in the vehicle. It is a simple swap if the engine is out of the vehicle, however this is not an option for most people. The process is doable with the engine in the vehicle but will take patience.

PROCEDURE:

1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
2. Open and support the hood of the vehicle.
3. Locate and remove the Fuel Pump Fuse in the Fuse Box.
4. Start the engine a few times until it stalls and Fuel Pressure is released. This will prevent Fuel from spraying everywhere when the Fuel Rails and Injectors are removed.
5. Drain the engine of Coolant. If the engine was recently run, Coolant will be hot. Use caution to prevent burning yourself.
6. Remove the Engine Cover if applicable.
7. Disconnect the Air Intake from the Throttle Body. *Figure 1.*

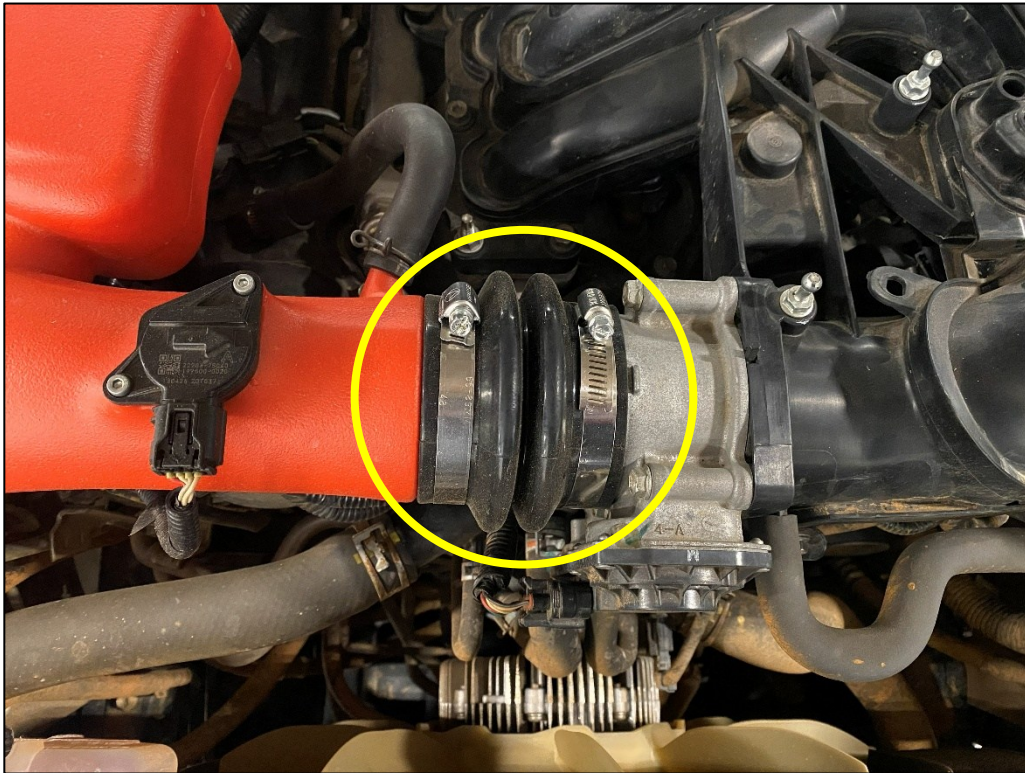


Figure 1

- Remove the (4) four bolts securing the Throttle Body to the Upper Manifold. Once the Throttle Body is loose, it can be moved aside in the Engine Bay. *Figure 2.*

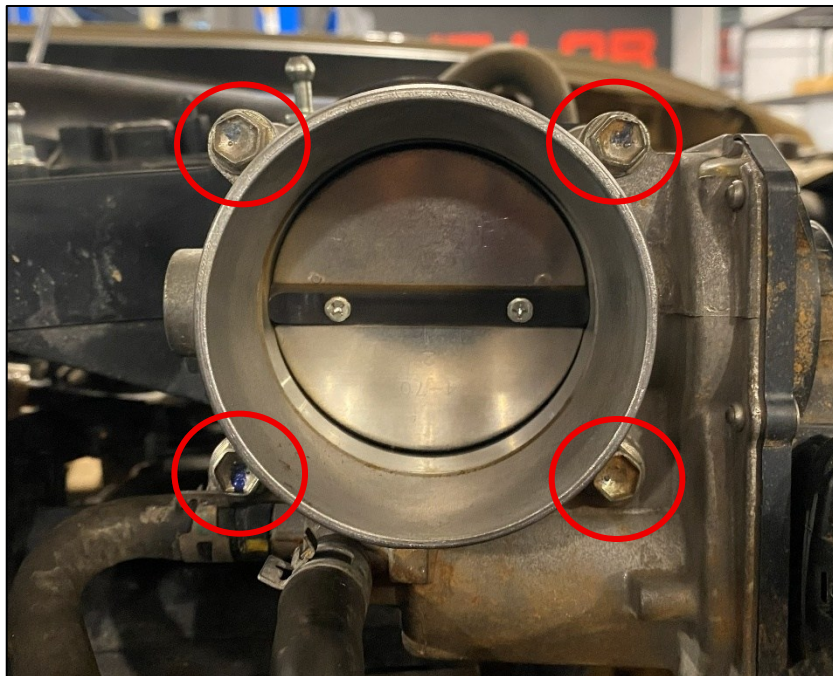


Figure 2

9. Disconnect the (3) three bolts on the front and driver side of the Upper Manifold that connect the Manifold to the support brackets. *Figure 3.*

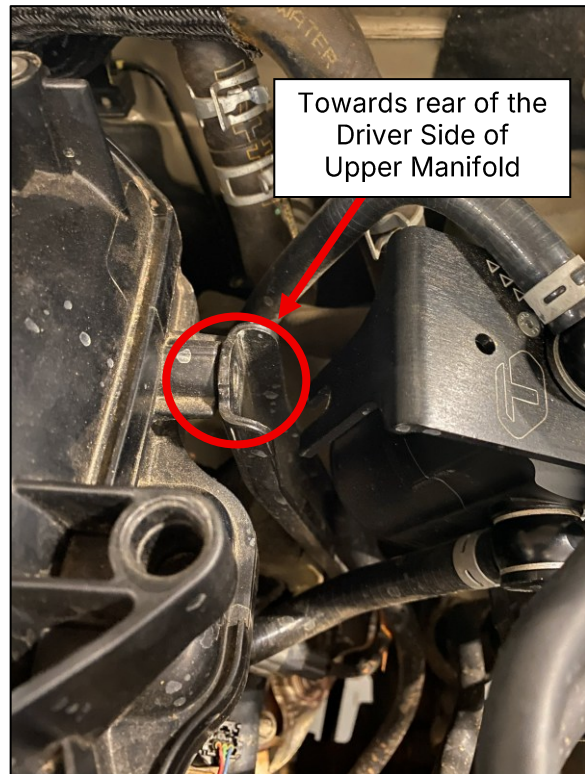
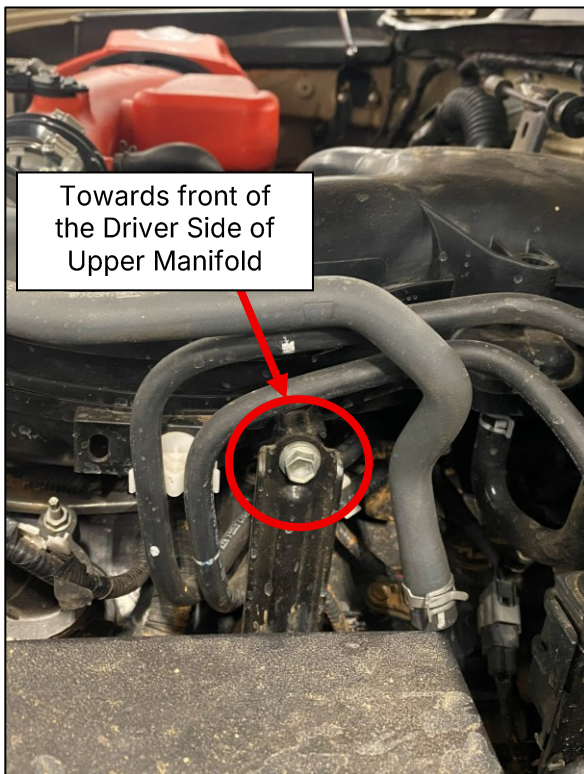
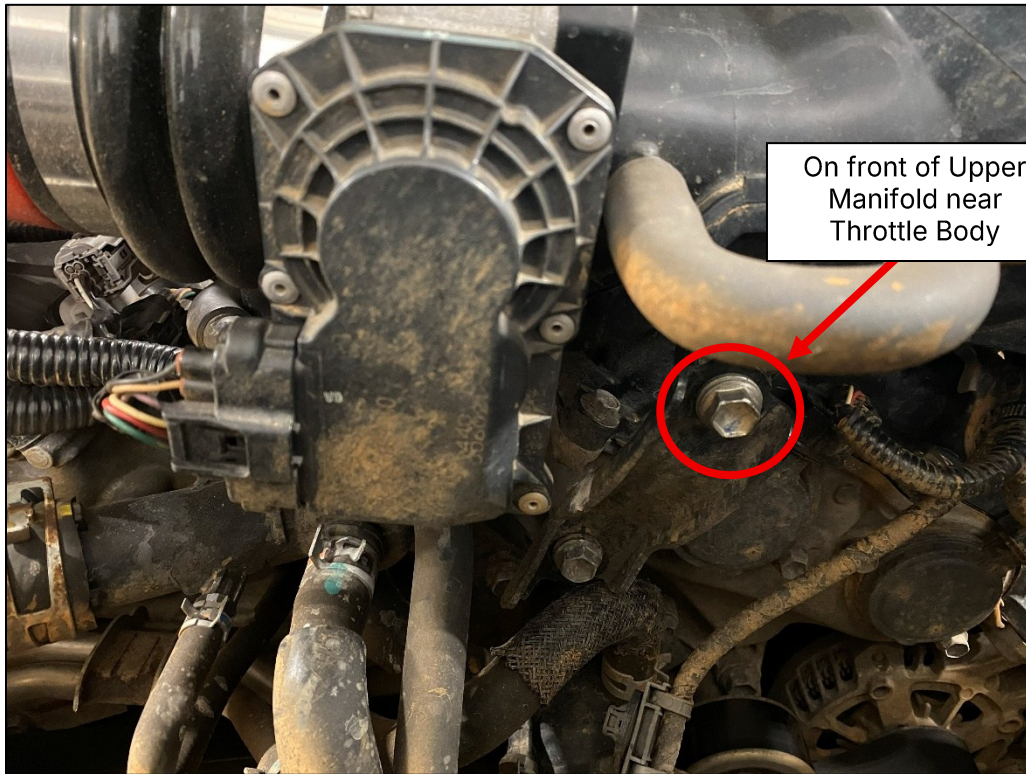


Figure 3

10. Disconnect the (1) one electrical connector on the back side of the Upper Manifold on the driver's side. *Figure 4.*



Figure 4

11. Remove the (7) seven nuts and bolts securing the Upper Manifold to the Lower Manifold. *Figure 5.*

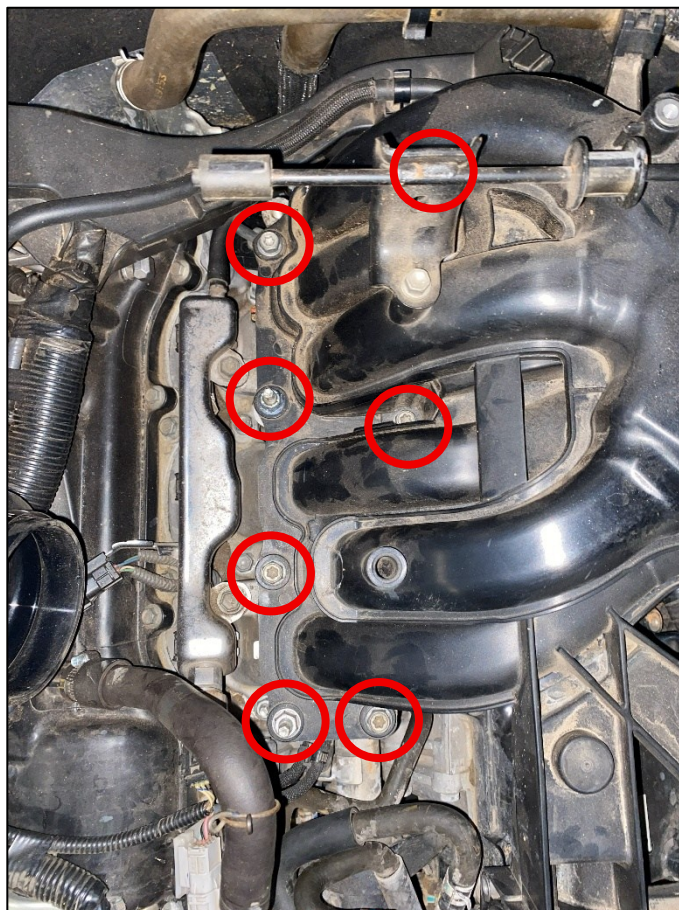


Figure 5

12. Raise the Upper Manifold off of the studs and flip it over and out of the way. Some hoses and other connectors may need to be disconnected if they bind or if you want to fully remove the Upper Manifold from the vehicle. *Figure 6.*



Figure 6

13. Unplug the Fuel Pressure Sensor at the front of the Lower Intake Manifold. *Figure 7.*

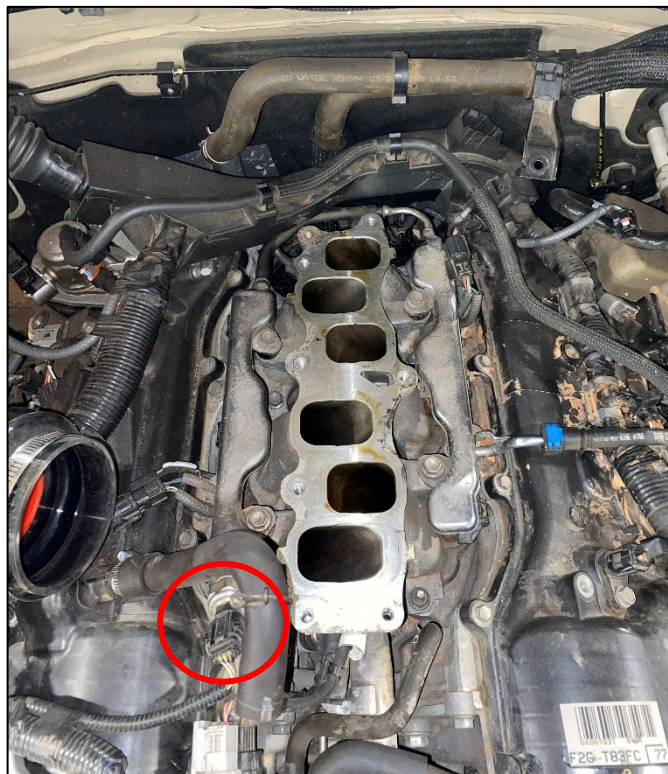


Figure 7

14. Unplug the (1) one Electrical Connector going to each Fuel Rail on the Lower Manifold.
15. Remove the (4) four bolts and (4) nuts securing the Lower Manifold to the Engine. Using a magnet to retrieve the hardware can help prevent it from falling into the Engine. *Figure 8.*

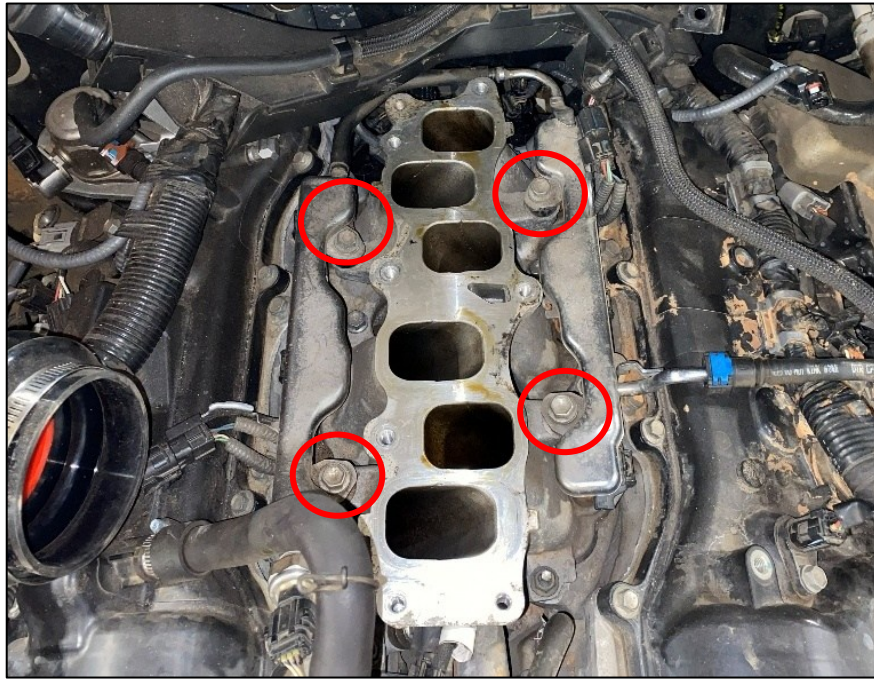


Figure 8

16. Remove the Lower Plenum from the vehicle and set aside. It is highly recommended to cover the Intake Runners with Tape or rags to prevent parts and debris from falling into the Engine. *Figure 9.*

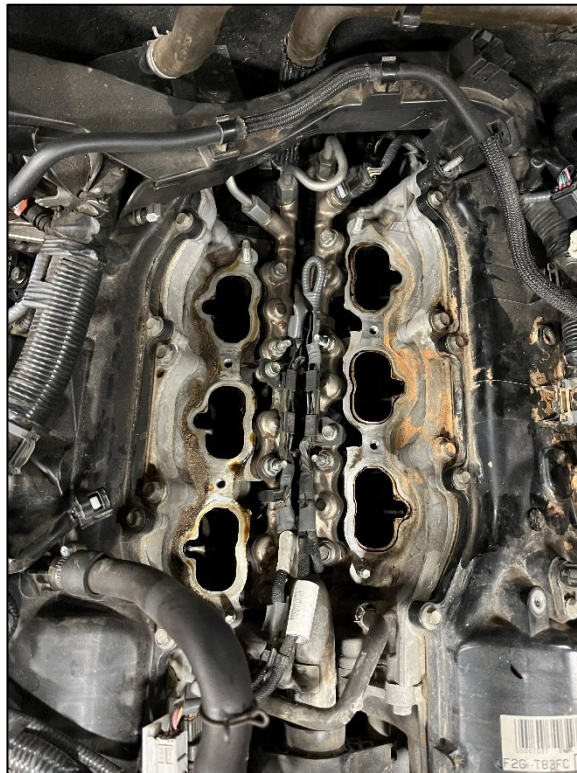


Figure 9

17. Cover the Intake Ports with Painters Tape to prevent debris or hardware from falling into the Engine.

18. Remove the (2) two bolts securing the Fuel Rail Harness to the Fuel Rails. *Figure 10.*

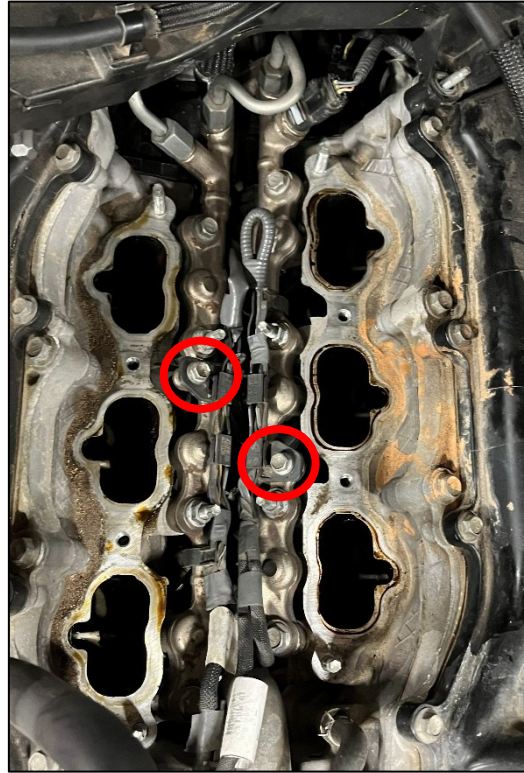


Figure 10

19. Disconnect the Union between both Fuel Rails towards the rear of the Engine. *Figure 11.*

20. Disconnect the Sensor on the Driver Side of the Fuel Rail. *Figure 11.*

21. Disconnect the Fuel Feed Line to the Fuel Rail on the Passenger Side. *Figure 11.*

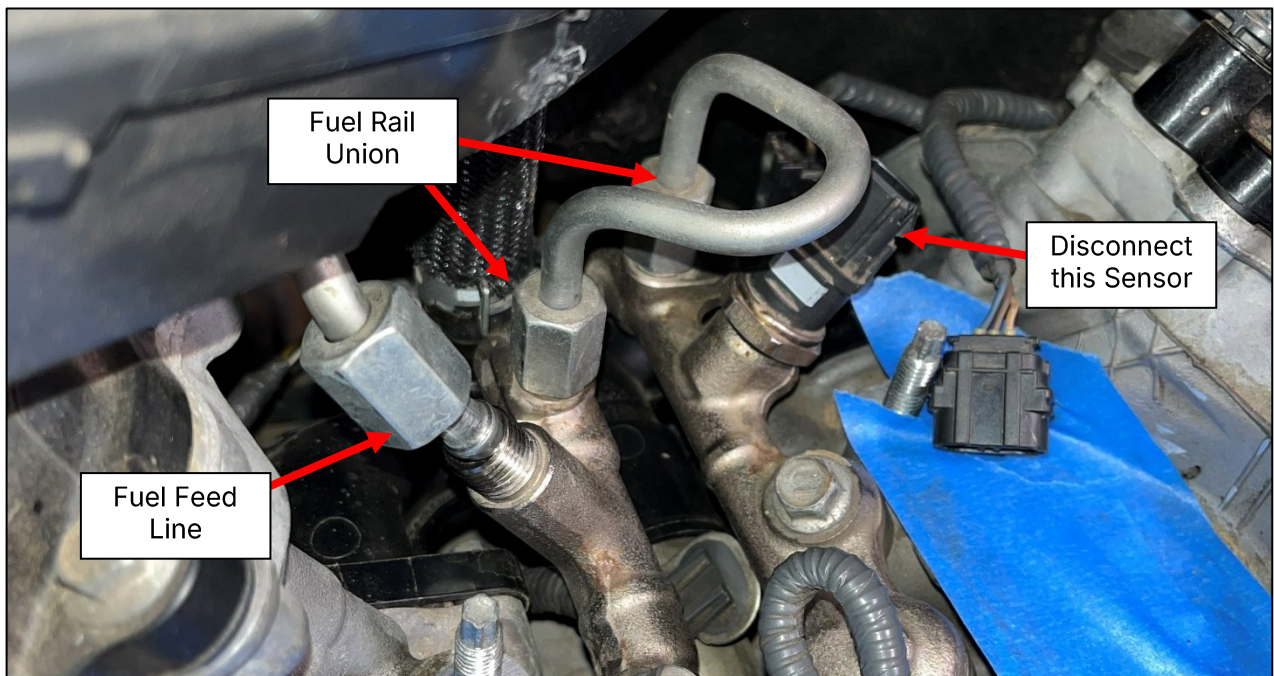


Figure 11

22. Disconnect the (6) six connectors from the lower Fuel Injectors.

23. Remove the (4) four nuts securing the Fuel Rails to the Engine. *Figure 12.*

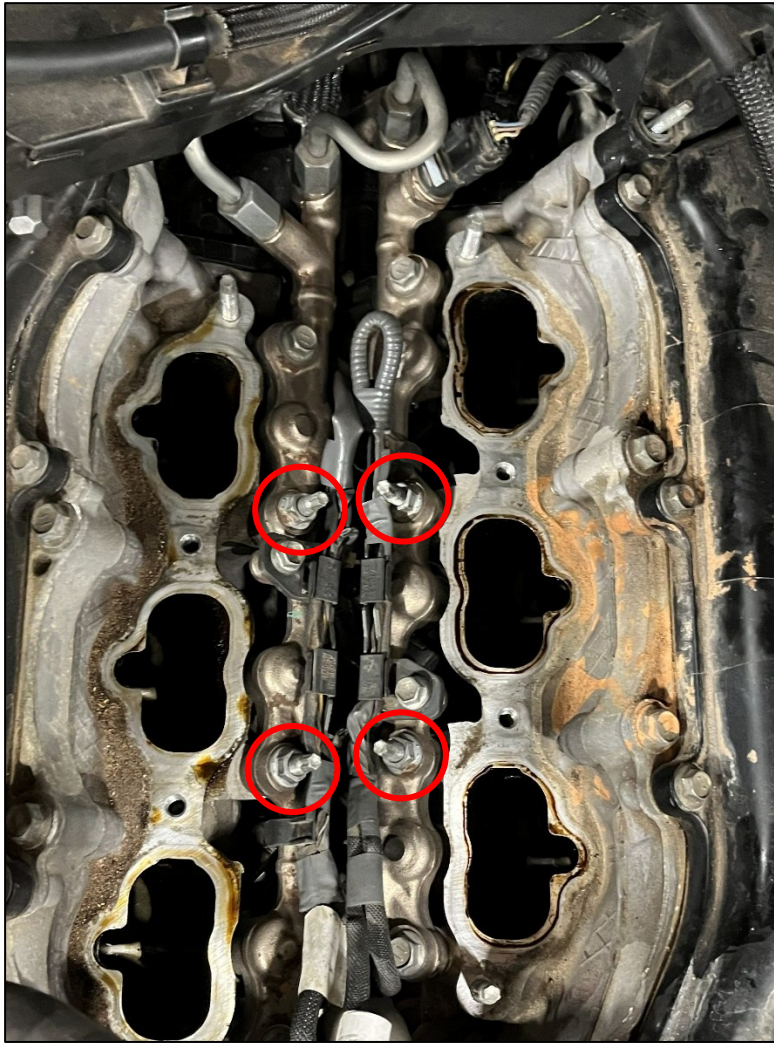


Figure 12

24. Raise and remove the Fuel Rails from the valley of the Engine. The Fuel Injectors may come out with the Fuel Rail but may also stay in the Engine. Check for any O-Rings that may fall when the Rails are removed.

25. Remove the High-Pressure Fuel Injectors from the Engine. Be careful not to knock any debris into the engine.

26. Disconnect the Coolant Temperature Sensor in the OE Coolant Bypass Pipe at the back of the Engine.
Figure 13.

27. Disconnect the OE Coolant Hose to the OE Coolant Bypass Pipe. *Figure 13.*



Figure 13

28. Remove the OE Coolant Bypass Pipe from the Engine. It is held on by (4) four bolts and (2) two nuts. This process can be very difficult and tedious, as the lower bolts are impossible to see and there is limited access for tools. Take your time removing the hardware. Once all hardware is removed, push the Bypass towards the Firewall to separate it from the Engine and disconnect the Wiring Harness Clip to fully remove it. The O-Ring on the Center Pipe can be reused or replaced with a new one. *Figure 14.*

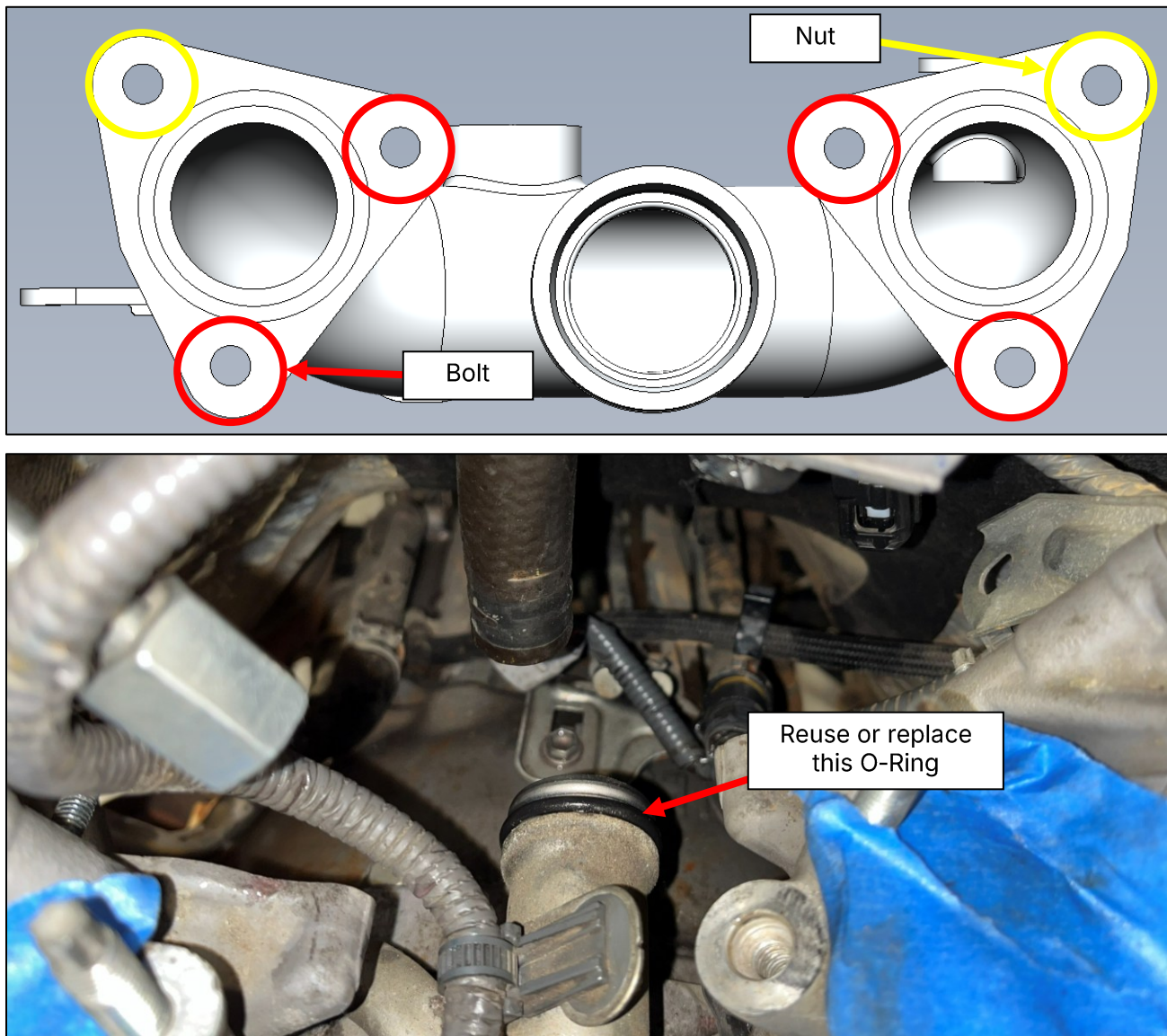


Figure 14

29. Locate the TEQSport Coolant Bypass Pipe and (2) two Circular Gaskets. Install the Gaskets into the grooves in the face of the Bypass Pipe. *Figure 15.*

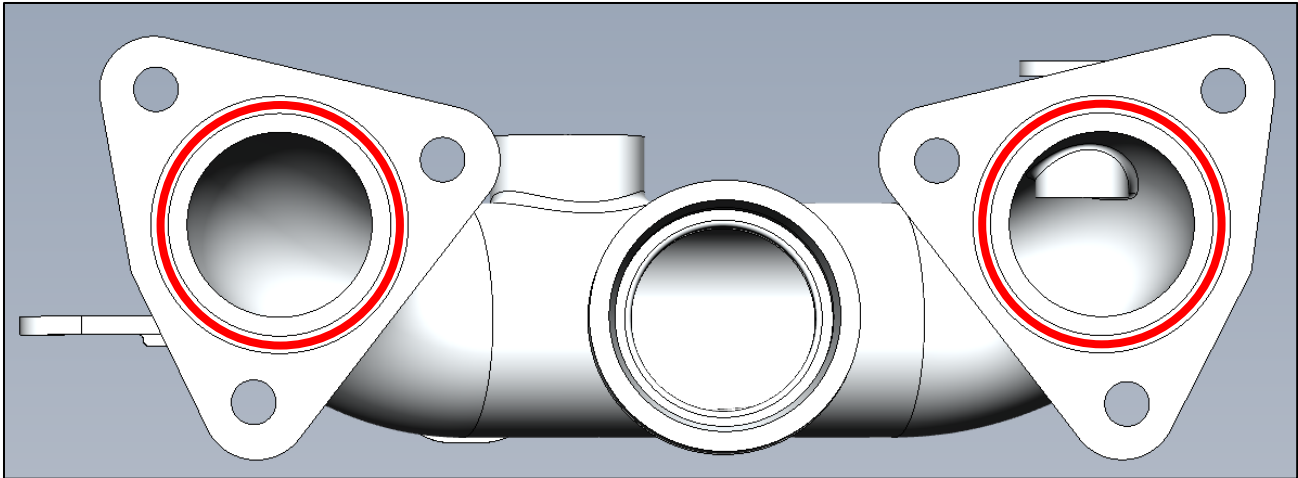


Figure 15

30. Locate the Coolant Port and O-Ring. Install the O-Ring onto the Coolant Port as shown. *Figure 16.*

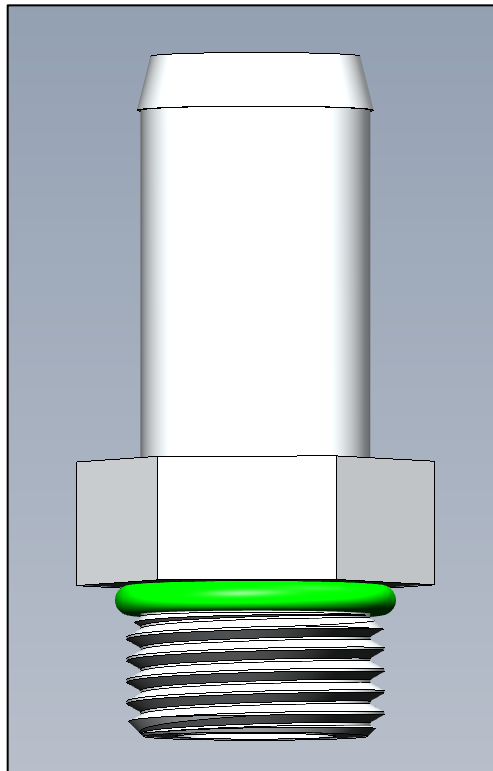


Figure 16

31. Install the Coolant Port into the Coolant Bypass Pipe. Tighten the Port until it bottoms out in the Bypass Pipe. **DO NOT** use Thread Sealant on this fitting. The O-Ring on the Coolant Port is a (1) one time use O-Ring once it has been tightened. If the Coolant Port is removed, the O-Ring **MUST** be replaced before reinstalling the Coolant Port. Figure 17.

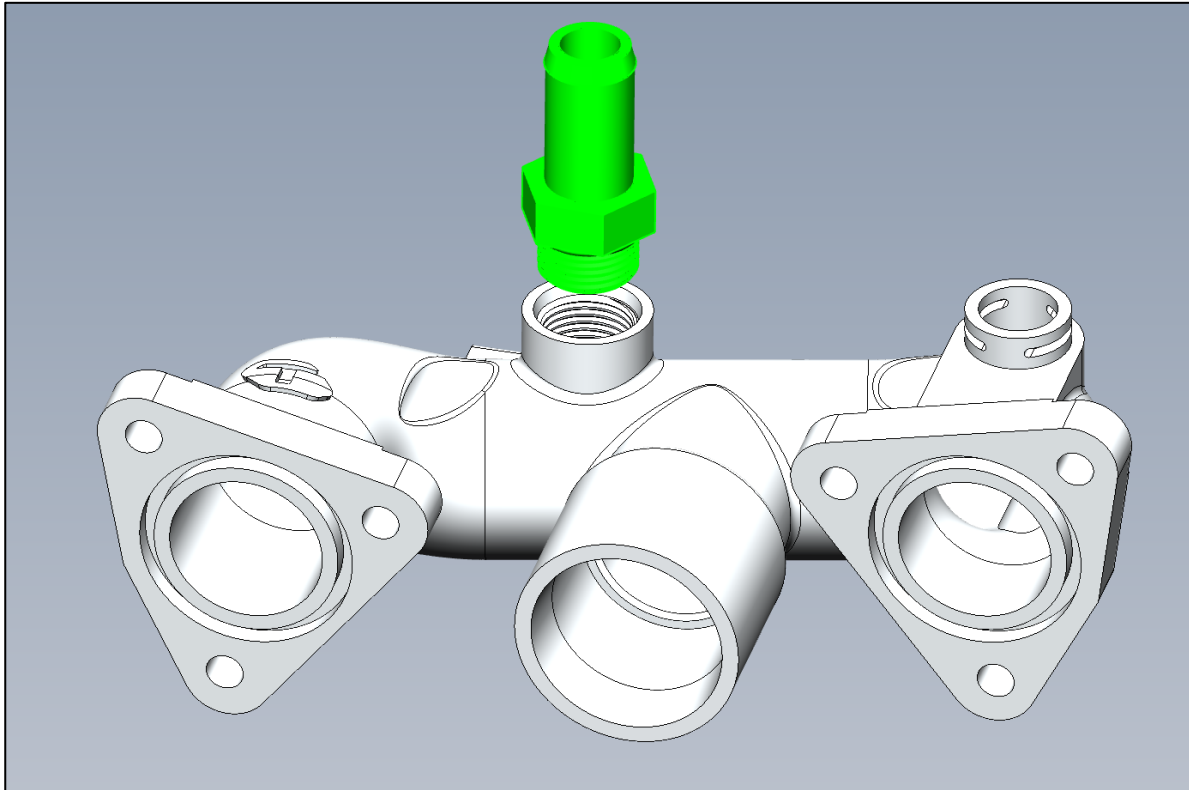


Figure 17

32. Transfer the Coolant Temperature Sensor from the OE Coolant Bypass Pipe to the TEQSport Coolant Bypass Pipe. Make sure to reuse the clip from the OE Pipe to secure the Sensor. *Figure 18.*



Figure 18

33. Install the TEQSport Coolant Bypass Pipe onto the back of the Engine with the OE Hardware removed in *Step 28*. Loosely start all hardware before tightening to ensure proper alignment. *Figure 19.*



Figure 19

34. Follow Steps 6-27 in reverse order to reinstall the Fuel Rails, Intake Manifolds, and remaining pieces that were removed.

NOTE: Before reinstalling the High-Pressure Fuel Injectors, make sure all of the O-Rings are on them. There is a high chance that they remained in the Fuel Rails when they were removed. Use a pick to remove the O-Rings from the Fuel Rails and reinstall them onto the Injectors as shown. Lightly coat the O-Rings with Petroleum Jelly to prevent damage upon installation. *Figure 20.*

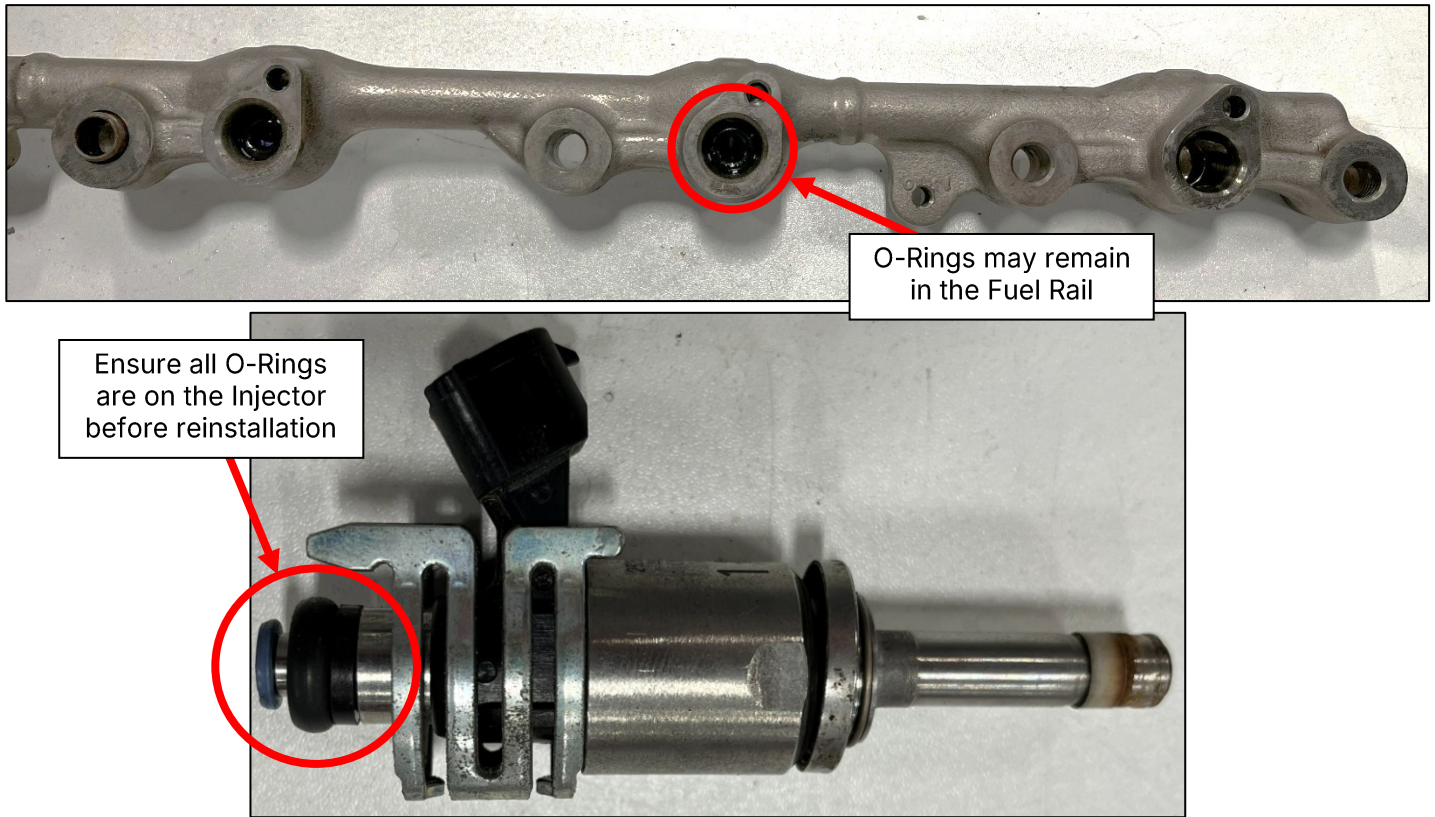


Figure 20

35. Refill and bleed the Coolant System in accordance with the Factory Service Manual. While bleeding the system, check for any Coolant Leaks.

END

Additional Technical Support:

Contact TEQSPORT at info@teqsport.com
Or call 770-832-7184 between 9am and 6pm ET